A Visual Language to Characterise Transitions in Narrative Visualization

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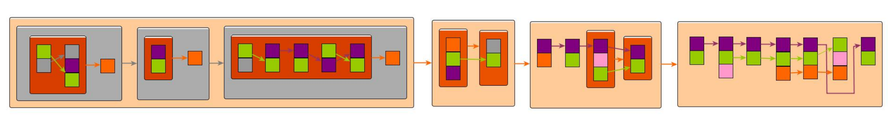
Abstract

The aim of this work is to explore, and characterise the transition types used to tell stories through information visualization. This was done by qualitatively coding the dataset of VAST challenge videos over the last four years based on the McCloud taxonomy of transition types in comics [1, 2] after refining the model and redefining its components.

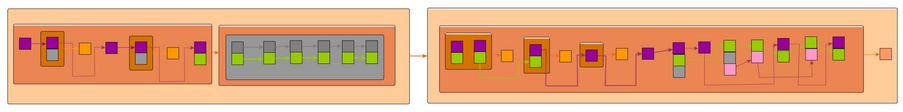
McCloud Taxonomy of Panel-to-Panel Transitions in Comics

Refinement of McCloud Taxonomy

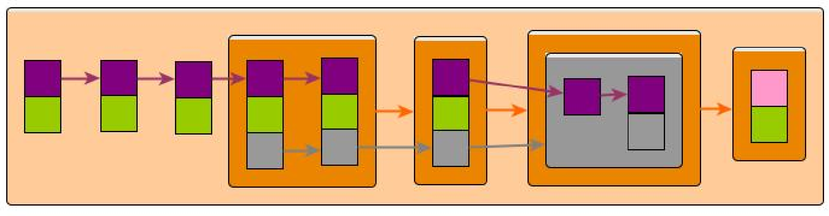
A subject is an entity/actor that does something in the story. For example, an employee, or an IP address. ***An action*** could be related to how the analyst(s) interacted with the data/tool (***Action Type 1***), or actions that represent part of the scenario (***Action Type 2***). If a video was divided into sub-topics, each sub-topic was considered a ***a scene***. A group of story units that lead to a finding is also considered ***a scene***. ***An Aspect-to-Aspect*** transition occurs when the visual representations, or applications changed from a story unit to another to look at the data from different angles. For example, between map view and timeline. Finally, ***a moment*** is a point of time in the story.



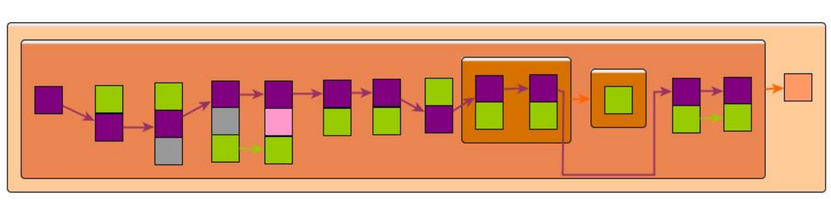
(a) A transition diagram showing nested grouping of aspects in the first part. (VAST 2009- MC2- giCentre, City University London)



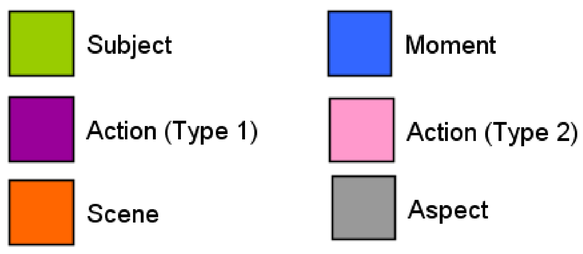
(b) A transition diagram showing the occurrence of an Action-to-Action transition between two actions that represent part of the data/scenario (Action Type 2). (VAST 2011- MC2- University of Konstanz).



(c) A transition diagram showing the occurrence of a Scene-to-Scene transition between a group of story units and the finding/conclusion drawn from this group. (VAST 2010- MC1- Georgia Institute of Technology)



(d) A transition diagram showing a delayed transition and emerging of finding at the end of a long series of actions. (VAST 2010- MC1- giCentre, City University London)



Sample Transition Diagrams and Observations.

Future Work

The next step after coding the videos is to look at all generated diagrams and analyse them by investigating different factors, such as the nature of the task/data, award winners, etc.

References

[1] S. McCloud. Understanding Comics. A Kitchen Sink book. Harper-Collins, 1994.

[2] S. McCloud. Making Comics. HarperCollins, 2011.

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